

Appln. No. 09/905,717

Amendment Date: January 18, 2005

Reply to Office Action of November 18, 2004

Amendments to the Abstract:

Please replace the Abstract with the following rewritten Abstract:

ABSTRACT

A filter and processing sequence is described that efficiently combines and performs two or more tasks required to demodulate a composite 3G (third generation) wireless signal formed by a combination of wideband 3.84 MHz (Universal Mobile Telecommunications System, identified as acronym "UMTS", or Universal Mobile Telecommunications System Terrestrial Radio Access, identified as acronym "UTRA") carriers and narrowband 1.2288 MHz CDMA-2000 carriers. The three tasks, applied to each spectral component of the 3G wireless signal and described in the order of a traditional filtering structure are: Spectral translation, Bandwidth Reduction, and Sample Rate Selection. These tasks are traditionally implemented in three distinct pieces of hardware or software modules.